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SOAH DOCKET NO. 473-21-0538
PUC DOCKET NO. 51415

2021 MAY 12 PM 3:00

APPLICATION OF SOUTHWESTERN §
ELECTRIC POWER COMPANY FOR §
AUTHORITY TO CHANGE RATES §
BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS

**SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA
CLUB'S SEVENTH SET OF REQUESTS FOR INFORMATION**

MAY 12, 2021

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**SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA
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Question No. SC 7-1:

Refer to the Rebuttal Testimony of Mark A. Becker at page 9.

- a. Provide all communications with the Arkansas Electric Coop Corp regarding the evaluation or decision to retrofit of Flint Creek to comply with the CCR or ELG rules.
- b. Provide all communications with U.S. EPA regarding SWEPCO's evaluation or decision to retrofit of Flint Creek to comply with the CCR or ELG rules.
- c. Provide all of SWEPCO's Capital Improvement Approval Requisitions for the CCR or ELG projects.

Response No. SC 7-1:

SWEPCO has filed an objection to this RFI.

Prepared By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

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Question No. SC 7-2:

Refer to the Rebuttal Testimony of Mark A. Becker at pages 2 and 6-7, and SWEPCO Schedule H-5.3b. For Flint Creek, for each line-item capital expenditure listed in Schedule H-5.3b:

- a. Explain what the line item refers to, and the reason for the expenditure.
- b. Provide the useful life for the expenditure.
- c. Indicate which portion of the capital expenditure is "in service," and the date the expenditure was put into service.
- d. If the expenditure is not "in service," provide the date on which it will be.
- e. State whether any portion of the expenditure could be avoided by retiring Flint Creek by 2028.
- f. Explain why SWEPCO included capital expenditures that are not in service or in rates in the Schedule.
- g. Admit that, once a utility has decided to retire a generation resource, the utility should decrease capital expenditures intended to extend the life of a plant. If not admitted, explain why not.
- h. Explain how the utility factors the proximity of a plant's retirement date into its capital expenditure plan? Specifically, state whether the Company has a policy or general practice of ramping down spending within a set time prior to a plants retirement date and explain said policy.
- i. After SWEPCO decided to retire Welsh Unit 2, did the Company reduce capital and O&M spending at the plant? If yes, please explain how the Company decided whether to make capital expenditures at the plant. If not, please explain.
- j. Please provide SWEPCO's capital spending plan for Welsh Unit 2 in the year prior to its decision to retire, and during the year in which it made the decision to retire the plant.

Response No. SC 7-2:

- a. Descriptions of the 164 distinct capital expenditures are included in Schedule H-5.3b, which was filed with the Company's case in chief on October 14, 2020.
- b. The useful life of each expenditure varies based on the nature of the project, the life of the equipment, and the operation of each generating unit. However, in general, the items are placed into various FERC accounts and are depreciated appropriately over the lives associated with each major equipment group as approved by the Commission.
- c. Schedule H-5.3b reflects capital expenditures by calendar year, and was not created based on in-service dates for any project or a "portion" of a project. Schedule H-5.2b includes all major plant additions (projects placed in service) for July 2016 through March 2020.

- d. See the response to part c.
- e. See the Company's response to Sierra Club 2-17 for the requested information.
- f. Schedule H-5.3b, its form and data, is included within the filing requirements for the Commission's rate filing package. Therefore, the Company provided the data as required.
- g. Denied. While the Company agrees that a generating unit's capital investment plan should be reviewed in the context of a planned retirement date, this statement is too broad to accept without qualification. Even if a unit is planned to be retired, additional capital investment could be required to continue operating a unit in a safe, efficient, and environmentally compliant manner to its planned retirement date. To the extent that such investments may also be seen as extending a unit's life, the Company would need to continue making some capital investments. However, the Company may have the opportunity to reduce capital expenditures as a unit approaches retirement and will review specific investments within the normal course of business under such circumstances.
- h. See the response to part g. The Company uses its professional judgment and good utility practice to determine how best to maintain a unit in a safe, reliable, and environmentally compliant manner prior to retirement.
- i. Yes. As also noted in part h, the Company relied upon its professional judgment and good utility practice to determine how to best to reduce capital investment and O&M expense as Welsh Unit 2 approached its retirement date.
- b. The decision to retire Welsh Unit 2 was announced a decade ago, in 2011. The decision to retire the unit was discussed in Docket No. 40443 before this Commission, and the retirement itself was fully litigated in Docket No. 46449, and is final. Documents related to the decision would be part of the record in those cases.

Prepared By: Brian K. Rupp

Title: Regulatory Case Mgr

Sponsored By: Monte A. McMahon

Title: VP Generating Assets SWEPCO

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Question No. SC 7-3:

Refer to SWEPCO response to SC 1-9 Attachment 1. Provide the CCR capital expenditures in the years they were incurred for the CCR and ELG projects.

Response No. SC 7-3:

SWEPCO has filed an objection to this RFI.

Prepared By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

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Question No. SC 7-4:

Refer to SWEPCO response to SC 2-6, HS Attachment 2 and Exhibit H-5.3b.

- a. Explain why the Forecast of Expenditures by project listed for the years 2021-2023 differs from the list of projected project expenditures on Exhibit H-5.3b.
- b. State which project expenditure forecast was created most recently.
- c. State whether the Company uses either of these, or any other capital expenditure forecasts, in deciding whether to continue to operate each of its coal-fired power plants.
- d. State whether the Company anticipates that it will incur capital expenditure costs beyond what is forecasted in SC-26 Highly Sensitive Attachment 2 over the next decade.

Response No. SC 7-4:

- a-b. The forecast used to create Schedule H-5.3b was from June 2020. The forecast used to create the response to SC 2-6 was from March 2021. The change in projected project expenditures from June 2020 to March 2021 is due to the Company's evolving plans over that time, such as the decision not to move forward with CCR and ELG projects at the Pirkey and Welsh plants.
- c. Yes.
- d. The Company's capital forecasts are created based on the best information available at the time, using professional judgment and good utility practice. The Company has not identified any forecasted capital costs based on information that is not currently known.

Prepared By: Brian K. Rupp

Title: Regulatory Case Mgr

Sponsored By: Monte A. McMahon

Title: VP Generating Assets SWEPCO

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Question No. SC 7-5:

Refer to Exhibit H-5.3b and the projects at the Welsh Plant. Indicate which of the project items were installed to comply with the MATS regulations.

Response No. SC 7-5:

The capital work designated as "WSHENVENG WSH U0 ACI - FF / Chimney" was the construction program that included the installation of equipment to meet MATS requirements, including a fabric filter (FF) and activated carbon injection (ACI).

Prepared By: Brian K. Rupp

Title: Regulatory Case Mgr

Sponsored By: Monte A. McMahon

Title: VP Generating Assets SWEPCO

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Question No. SC 7-6:

Provide SWEPCO's base fundamental forecast for every year between 2015 and present.

Response No. SC 7-6:

Please see SC_07_006_Attachment(s) 1 through 4. See also the supplemental response to CARD 2-10 for the most recent commodity price forecast.

Sierra Club Attachments 1 through 4 have been provided electronically on the PUC Interchange.

Prepared By: Karl R. Bletzacker

Title: Dir Fundamental Analysis

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

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Question No. SC 7-7:

State whether SWEPCO has entered into any bilateral contracts to buy or sell capacity within the last five years?

- a. If yes, provide a copy of all such contracts.
- b. State the quantity of capacity purchased or sold and the time period over which the contract was in effect.
- c. State whether the contract is for firm or non-firm capacity.
- d. State the price paid or received for the capacity.

Response No. SC 7-7:

No.

Prepared By: Scott E. Mertz

Title: Regulatory Consultant Staff

Sponsored By: Jason M. Stegall

Title: Reg Pricing & Analysis Mgr

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Question No. SC 7-8:

Refer to SWEPCO response to Sierra Club 1-8, HS Attachment 1. Explain what costs are included in the Fixed O&M category of costs.

Response No. SC 7-8:

The Fixed O&M dollars include fixed costs for operating the plant and property taxes for the units.

Prepared By: Joseph S. Perez

Title: Forecast Analyst Prin

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

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Question No. SC 7-9:

Refer to SWEPCO response to Sierra Club 3-1, Highly Sensitive Attachment 4.

- a. Provide the study and all analysis used to develop the findings presented here.
- b. State whether the power flow modeling was conducted with any new resource options available in the NW Arkansas load pocket.

Response No. SC 7-9:

- a. See SC_7-9_CONFIDENTIAL_Attachments_1-4.
- b. The power flow modeling was not conducted with any new resource options available in the NW Arkansas load pocket.

The attachments responsive to this request are CONFIDENTIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: William M. Romine

Title: Regulatory Consultant Staff

Sponsored By: Wayman L. Smith

Title: Dir Trans Planning

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Question No. SC 7-10:

Refer to SWEPCO response to Sierra Club 2-2 Highly Sensitive Attachment 13.

- a. State whether the costs are in nominal or real dollars, and if real, what dollar year.
- b. Provide the assumed cost decline or escalation rates.
- c. State the source of each Replacement Cost and cost decline or escalation rates.
- d. Provide the project lifetime.

Response No. SC 7-10:

- a. The costs represented in SC 2-2 Highly Sensitive Attachment 13 are nominal 2020 dollars.
- b. For learning escalation rates please see Sierra Club 7-10 Attachment 1.
- c. The EIA'S AEO2020 report was the source of learning curve escalation rates and capital cost for thermal and renewable replacement capacity.
- d. Combined cycles, combustion turbines, wind, and solar resources have a 30 year life. Gas conversion plants and battery storage have a 10 year life. PPA capacity has a 5 year life.

Prepared By: Joseph S. Perez

Title: Forecast Analyst Prin

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

Thermal Resources	
learning Curve Escalation (%)	
2021	0.245%
2022	1.640%
2023	-0.350%
2024	0.970%
2025	2.048%
2026	2.078%
2027	2.440%
2028	2.793%
2029	2.770%
2030	2.902%
2031	2.786%
2032	2.566%
2033	2.499%
2034	2.489%
2035	2.378%
2036	2.365%
2037	2.283%
2038	2.260%
2039	2.355%
2040	2.577%
2041	2.588%
2042	2.641%
2043	2.659%
2044	2.637%
2045	2.510%
2046	2.599%
2047	2.573%
2048	2.546%
2049	2.498%
2050	3.301%

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Question No. SC 7-11:

Refer to Schedule H-5-3.b.

- a. For 2020, break out which costs were projected and which were incurred.
- b. Update with all incurred costs for 2020.

Response No. SC 7-11:

- a. As described in the response to Sierra Club 7-2, Schedule H-5.3b was created to meet filing requirements of the Commission's rate filing package, and was not created with regard to in-service costs actually incurred and included in the Company's capital additions for consideration in rates.
- b. Major capital investments that were actually made (incurred) and in-service at the end of the Company's test year in this proceeding are included in Schedule H-5.2b.

Prepared By: Brian K. Rupp

Title: Regulatory Case Mgr

Sponsored By: Monte A. McMahon

Title: VP Generating Assets SWEPCO

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Question No. SC 7-12:

Refer to SWEPCO response to Sierra Club 2-2 Highly Sensitive Attachment 2.

- a. State whether the cost of a new 345 kV line upgrade is included in the analysis.
- b. State whether the Company has evaluated the cost to install the transmission upgrades.
 - i. If yes, provide the transmission project costs.
 - ii. If no, explain why no such analysis has been conducted.
- c. Explain what each of the resource labels represent and how it is used by the model.

Response No. SC 7-12:

- a. Yes, the 345kV line costs were included in the economic evaluation for Flint Creek.
- b. Yes, the Company has evaluated the cost of 345kV line at Flint Creek power station, if the unit is assumed to retire.
 - i. Please see the response to Sierra Club 6-5 for the transmission costs assumed in SC 2-2 Highly Sensitive Attachment 2.
 - ii. N/A
- c. In reference to SC 2-2 Attachment 2, :
 - 1) For Utility Costs (Nominal\$) section of report: Load Cost represents the cost to serve SWEPCOs load at modeled market energy prices for the assumed commodity price forecast.
 - 2) For Utility Costs (Nominal\$) section of report: Fuel Costs represent the existing units' and any new build thermal resources' fuel costs for fuel burned to produce energy during the planning period. Fuel Cost is an output from the model.
 - 3) For Utility Costs (Nominal\$) section of report: Emission Costs represent CO2 and consumables reagent costs associated with energy production by existing and any new build thermal resources. Emission Cost is an output from the model.
 - 4) For Utility Costs (Nominal\$) section of report: Existing System FOM and OGC Cost represent the fixed costs (Fixed O&M and On-going capital recovery) of the units and the recovery of transmission system upgrade costs in the Flint Creek retirement case.
 - 5) For Utility Costs (Nominal\$) section of report: The Incremental Fixed and Variable Cap Charges Costs represent the fixed and variable O&M cost of production for any new units built in the planning period and any variable O&M costs from existing units.

- 6) For Utility Costs (Nominal\$) section of report: Incremental Capital+ Renewable+EE+VVO Program Costs represents the recovery of the capital costs from any new thermal, renewable and VVO resource additions and the energy-efficiency program implementation costs.
- 7) For Utility Costs (Nominal\$) section of report: Contract Revenue/Cost represents the net of revenues and cost associated with existing generation contracts.
- 8) For Utility Costs (Nominal\$) section of report: Market Revenue is the revenue the existing and any new resource additions receive from making market energy sales.
- 9) For Utility Costs (Nominal\$) section of report: Grand Total Net Utility Costs are the total utility costs minus revenues from market energy sales.
- 10-11) For Resource Capacity Additions section: Supply-Side (Thermal) annual and cumulative megawatts show year-over-year and cumulative thermal resources added during the planning period.
- 12-13) For Resource Capacity Additions section: Incremental energy efficiency + VVO annual and cumulative megawatts show year-over-year and cumulative for these resources added during the planning period.
- 14-15) For Resource Capacity Additions section: Distributed Solar annual and cumulative megawatts show year-over-year and cumulative for these resources added during the planning period.
- 16-17) For Resource Capacity Additions section: Generic Wind annual and cumulative megawatts show year-over-year and cumulative for these resources added during the planning period.
- 18-19) For Resource Capacity Additions section: Utility Solar annual and cumulative megawatts show year-over-year and cumulative for these resources added during the planning period.
- 12) For Energy and Capacity Positions section: Thermal Generation is the sum of generation for both the existing units' plus any new thermal builds in the planning period.
- 13) For Energy and Capacity Positions section: Current Purchased Energy is the sum of generation from the existing wind power purchase agreements.
- 14) For Energy and Capacity Positions section: New Wind, EE, Solar, and IVV is the sum of generation from new wind, solar, energy efficiency, distributed solar, and volt-var optimization resources.
- 15) For Energy and Capacity Positions section: Market Sales equals the sum of generation for new resources: Thermal, power purchase generation contracts, wind, solar, EE, and VVO.
- 16) For Energy and Capacity Positions section: Net Load Requirements represents SWEPCO's load in gigawatt hours.

- 17) For Energy and Capacity Positions section: Energy Surplus is the difference between market sales of generation into the market and the load responsibility. A negative value indicates the need to purchase energy from the market to cover our load obligation. 17) Capacity is the sum of all generating units' capabilities in megawatts.
- 18) For Energy and Capacity Positions section: Peak Plus Reserves is SWEPCO's peak load plus the 12% reserve margin established by SPP.
- 19) For Energy and Capacity Positions section: Capacity Surplus is the difference between capacity and peak plus reserves in megawatts.
- 20) For Energy and Capacity Positions section: Reserve Margin is calculated reserve margin that includes existing generator capacity plus any new capacity built in planning period divided by the peak load.
- 21) For Carbon Intensities section of report: Existing Units CO2 Emissions shows the total tons of carbon produced from SWEPCOs existing fleet.
- 22) For Carbon Intensities section of report: Total System CO2 Emissions show the total tons of carbon produced from SWEPCOs existing fleet plus any new build thermal capacity.
- 23) For Unit Prices/Cost section of report: Net Load Cost in (\$/MWh) is the average cost of the SWEPCO's load.
- 24) For Unit Prices/Cost section of report: Market Realization for Energy (\$/MWh) is the average cost of dispatched generation.
- 25) For Unit Prices/Cost (Nominal\$) section of report: Grand Total Net Cost to Load (\$/MWh) is the total cost divided by SWEPCO's load.

Prepared By: Joseph S. Perez

Title: Forecast Analyst Prin

Sponsored By: Mark A. Becker

Title: Mng Dir Res Plnning&Op Anlysis

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Question No. SC 7-13:

Refer to SWEPCO response to SC 2-17, Attachment 1.

- a. Explain why the total Flint Creek project cost in this attachment differs from the total project cost on SC 1-9, Attachment 1.
- b. State the amount of each of the CCR/ELG and Pond Closure costs that were included in the test year rate base.

Response No. SC 7-13:

SWEPCO has filed an objection to this RFI.

Prepared By: Brian K. Rupp

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